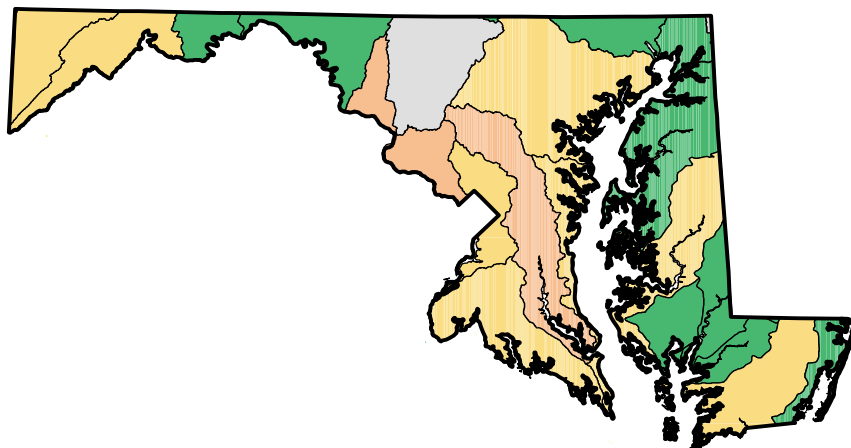


# Maryland



Percent of Assessed Rivers, Lakes, and Estuaries Meeting All Designated Uses

- 80% - 100% Meeting All Uses
- 50% - 79% Meeting All Uses
- 20% - 49% Meeting All Uses
- 0% - 19% Meeting All Uses
- Insufficient Assessment Coverage
- Basin Boundaries (USGS 8-Digit Hydrologic Unit)

For a copy of the Maryland 1998 305(b) report, contact:

**Sherm Garrison**  
 Maryland Department of Natural Resources  
 Resource Assessment Service/TEA  
 Tawes State Office Building, D-2  
 Annapolis, MD 21401  
 (410) 260-8624  
 e-mail: sgarrison@dnr.state.md.us

## Surface Water Quality

Overall, Maryland's surface waters have good quality, but excess nutrients, suspended sediments, bacteria, toxic materials, or stream acidity impact some waters. The most serious water quality problem in Maryland is the continuing accumulation of nutrients in estuaries and lakes from agricultural runoff, urban runoff, natural nonpoint source runoff, and point source discharges. Excess nutrients stimulate algal blooms and low dissolved oxygen levels that adversely impact water supplies and aquatic life.

Sources of sediment include agricultural and urban runoff, construction activities, natural erosion, dredging, forestry, and mining operations. In western Maryland, acidic waters from abandoned coal mines severely impact some streams. Agricultural, urban, and natural runoff and failing septic systems elevate bacteria concentrations, causing continuous shellfish harvesting restrictions in about 102 square miles of estuarine waters and temporary restrictions in another 71.1 square miles after major rainstorms.

Maryland did not report on the condition of wetlands.

## Ground Water Quality

Maryland's ground water resource is of generally good quality. Localized problems include excess nutrients (nitrates) from fertilizers and septic systems; bacteria from septic systems and surface contamination; saline water intrusion aggravated by ground water withdrawals in the coastal plain; toxic compounds from septic tanks, landfills, and spills; petroleum products from leaking storage facilities; and acidic conditions and metals from abandoned coal mine drainage in western Maryland. Control efforts are limited to implementing agricultural best management practices and enforcing regulations for septic tanks, underground storage tanks, land disposal practices, and well construction.

## Programs to Restore Water Quality

Maryland manages nonpoint sources with individual programs for each individual nonpoint source category. Urban runoff is addressed through stormwater and sediment control laws that require development projects to maintain predevelopment runoff patterns through implementation of best management practices, such as detention ponds or vegetated swales. The Agricultural Water Quality Management Program supports many approaches, including Soil Conservation and Water Quality Plans, implementation of BMPs, and education. The Agricultural Cost Share Program has provided state and some federal funds to help offset the costs of implementing almost 8,000 agricultural BMPs since 1983.

## Programs to Assess Water Quality







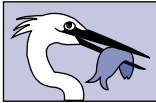



Maryland's monitoring programs include a combination of water chemistry, compliance, aquatic resource, and habitat monitoring programs. In addition to traditional monitoring, Maryland also conducts an innovative randomized sampling program in Chesapeake Bay waters using a probabilistic approach to sample analysis. Besides these programs, data from local governments and volunteer groups are available in some areas of the state.

– Not reported in a quantifiable format or unknown.

<sup>a</sup> A subset of Maryland's designated uses appear in this figure. Refer to the state's 305(b) report for a full description of the state's uses.

<sup>b</sup> Includes nonperennial streams that dry up and do not flow all year.

## Individual Use Support in Maryland

Designated Use <sup>a</sup>	Percent					
	Good (Fully Supporting)	Good (Threatened)	Fair (Partially Supporting)	Poor (Not Supporting)	Not Attainable	
Rivers and Streams (Total Miles = 17,000) <sup>b</sup>						
	Total Miles Assessed	94				
	6,682		-	5	1	-
	Total Miles Assessed	100				
	17,000		-	0	0	-
	Total Miles Assessed	100				
	17,000		-	<1	<1	-
Lakes (Total Acres = 77,965)						
	Total Acres Assessed	37		63		
	21,010		-		0	-
	Total Acres Assessed	100				
	21,010		-	<1	0	-
	Total Acres Assessed	98				
	5,023		-	1	1	-
Estuaries (Total Square Miles = 2,522)						
	Total Square Miles Assessed	55		45		
	2,459		-		<1	-
	Total Square Miles Assessed	99				
	2,465		-	1	0	-
	Total Square Miles Assessed	92				
	1,839		0	4	4	-
	Total Square Miles Assessed	100				
	2,465		-	<1	<1	-

Note: Figures may not add to 100% due to rounding.